

CLAIMS

1-27. (previously canceled)

28. (presently amended) An article with improved energy consumption efficiency, comprising a contact surface and a film formed thereon, the film having a thickness of 0.01 to 10 μ m and a viscosity of 100,000 cp or less, the film comprising an antislipping agent consisting of fine particles of an average particle diameter of 10 μ m or less, the film comprising a polymer binder selected from the group consisting of polyethylene; a methyl, phenyl, chloro, hydroxy, acetoxy, or cyano derivative of polyethylene; polybutadiene; a methyl or chloro derivative of polybutadiene; a copolymer of said polyethylene derivative and said butadiene derivative; silicone; polysulfide; polyurethane; modified silicone; modified epoxy resin; and modified acrylic resin; wherein the article is a rubber tire or shoe sole.

29. (previously presented) The article of claim 28, wherein at least a portion of the antislipping agent is partially exposed throughout a surface of the film.

30. (previously presented) The article according to claim 28, wherein the antislipping agent is mainly comprised of at least one chosen from the group consisting of silicon oxide, aluminum oxide, cerium oxide, silicon carbide, and a finely particulate organic material.

31. (previously presented) The article of claim 28 wherein the viscosity of said film is 10,000 to 100,000 cp.

32. (previously presented) The article of claim 31 wherein said viscosity is 10,000 to 50,000 cp.

33. (previously presented) The article of claim 32 wherein said viscosity is 10,000 to 20,000 cp.

34. (previously presented) The article of claim 28 wherein the thickness of the film is 0.01 to 1 μm .

35. (previously presented) The article of claim 34, wherein said thickness is 0.01 to 0.1 μm .

36. (previously presented) The article of claim 28 wherein said average particle diameter is 10 nm to 10 μm

37. (previously presented) The article of claim 36 wherein said diameter is 10 nm to 1 μm .

38. (previously presented) The article of claim 37 wherein said diameter is 10 to 100 nm.

39. (withdrawn) A method of improving the energy consumption efficiency of a contact surface, comprising the steps of, in order:

preparing an energy consumption efficiency improving agent by

selecting a flexible polymer binder from the group consisting of (a) polyethylene; a methyl, phenyl, chloro, hydroxy, acetoxy, or cyano derivative of polyethylene; polybutadiene; a methyl or chloro derivative of polybutadiene; a copolymer of said polyethylene derivative and said butadiene derivative; and (b) precursors of the following: silicone; polysulfide; polyurethane; modified silicone; modified epoxy resin; and modified acrylic resin; the binder having a viscosity of 100,000 cp or less;

selecting a solvent from the group consisting of methyl alcohol, denatured ethyl alcohol, isopropyl alcohol, propyl alcohol, acetic acid, and cyclohexane;

diluting the binder with an amount of the solvent so that a resulting mixture has a viscosity of 100 cp or less;

applying the energy consumption efficiency improving agent to the contact surface as a film having a thickness of 10 μm or less;

in a case where the binder is selected as a precursor of group (b), effecting a condensation action on the film with an external substance; and

effecting an evaporation or dissolution of the solvent such that the film has a viscosity of 100,000 cp or less.

40. (withdrawn) The method of claim 39, further comprising the step of:
prior to the applying step, adding to the energy consumption efficiency improving agent an antislipping agent, the antislipping agent consisting of fine particles of an average particle diameter of 10 μ m or less.

41. (withdrawn) The method of claim 40, wherein at least a portion of the antislipping agent is partially exposed throughout a surface of the film.

42. (withdrawn) The method of claim 39 wherein the viscosity of said mixture due to the presence of solvent is 20 to 100cp.

43. (withdrawn) The method of claim 42 wherein said viscosity is 20 to 50 cp.

44. (withdrawn) The method of claim 43 wherein said viscosity is 20 to 35 cp.

45. (withdrawn) The method of claim 44 wherein said external substance is water.

46. (withdrawn) The method of claim 45 wherein said solvent is isopropyl alcohol.

47.(withdrawn) The method of claim 39 wherein said mixture contains 1.42 to 1.58 wt. % of said flexible polymer binder and 94.81 to 98.5 wt. % of said solvent.